



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,598	09/16/2003	Gerald Winton Lankford	1578.109 (11119-US-PAT)	3266
54120 7590 03/19/2008 RESEARCH IN MOTION ATTN: GLENDA WOLFE BUILDING 6, BRAZOS EAST, SUITE 100 5000 RIVERSIDE DRIVE IRVING, TX 75039			EXAMINER KARIKARI, KWASI	
			ART UNIT 2617	PAPER NUMBER
			MAIL DATE 03/19/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/663,598	Applicant(s) LANKFORD, GERALD WINTON	
	Examiner KWASI KARIKARI	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-11 and 13-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-7,9-11 and 13-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In view of the Pre-appeal filed on 11/09/2007 and 12/15/2007, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Charles N. Appiah/

Supervisory Patent Examiner, Art Unit 2617

Response to Arguments

2. Applicant's arguments with respect to claims 1 and 13 have been considered but are moot in view of the new ground(s) of rejection.

Regarding claims 2-7,9-11 and 14-20, the Applicant argues that there is no suggestion to combine the references (i.e., Sanchez and Aerrabotu), however the

Art Unit: 2617

examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art.

See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992) and (*Anderson's Black Rock Inc. v. Pavement Salvage Co.*). (KRS Ruling. Requirement A.)

In this case, both Sanchez and Aerrabotu are analogous art that teaches a communication system that manages subscriber's information, therefore it is proper to combine both reference. In view of the above remarks, the rejections using Sanchez and Aerrabotu are proper.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-7,9-11 and 13-20 are rejected under U.S.C. 103(a) as being anticipated by Sanchez Ferreras et al., (U.S. 20050118998 A1), (hereinafter Sanchez) in view of Aerrabotu et al., (U.S. 20040190522 A1), (hereinafter Aerrabotu) and further in view of Takubo et al., (US 6,597,909), (hereinafter Takubo).

Regarding claims 1 and 13, Sanchez discloses an apparatus for a communication system having multiple portions, said apparatus comprises:

a detector (= processor 4 detects and reads all the information that passes through it, see Pars. [0005] and [0045]) adapted to receive values of positional information associated with mobile nodes (= mobile network can detect mobile terminals, see Par. [0017]), during operation thereof to communicate by way of network portions (HLR, VLR and gateway 2) in whose coverage area that the mobile nodes, respectively, are positioned said detector configured to form indications of the values of the positional information (= processor 4 continuous reads information exchange, see Par. [0025]);

an associator adapted to receive the indications formed by said detector of the values of the positional information (= analyzer 6, collects information, analyzes information of a location changes, see Par. [0006 and 0029]), said associator configured to associate position of each of the mobile nodes with corresponding respective network portion (= the information are report such that terminals can obtain service while they are in foreign network, see Pars. [0023-25] and [0029]), respectively, through which communication are effectuated, thereby to identify roaming relationship

between each of the mobile nodes and the corresponding network portion when the mobile nodes are roaming (= foreign networks) and

a storage element coupled to said associator, said storage element configured to store values representative of associations formed by said associator, the values together forming a roaming network table indicating the roaming relationships (= the database 7 has information of which subscribers are located in a foreign network, see Par. [0026] and the database incorporates a log table which could be updated with a each network change, see Pars. [0041-42, 0012 and 0033]), the value forming entries, the mobile nodes identified in terms of their respective home network portion (see Pars. 0029, 0043 and 0047), the roaming network table accessible to identify the roaming relationships identified therein (= the database 7 has information of which subscribers are located in a foreign network, see Par. [0026] and the database incorporates a log table which could be updated with a each network change, see Pars. [0012, 0041-42, 0032-36]), usable subsequently to determine roaming capability of selected coverage areas of selected network portions (see Pars. [0036-37 and 0046]).

Sanchez does disclose a roaming network but fails specifically to teach that “individual ones of the entries given lesser weight than other entries, without being deleted, when aged beyond a selected age” and that the “network is a packet data network and the network is connected other network by the way of a “**respective gateway**”to each of respective network portion.

Takubo, however teaches a roaming subscriber's data storage system where roaming data are stored in a prioritized fashion (i.e. in ascending order) based on the

Art Unit: 2617

dates that particular data was accessed (see col. 1, line 52- col. 2, line 13; and col. 7, line 8- col. 8, line 20; whereby the storage of data in the prioritized order is being associated with the “entries given lesser weight than other entries, without being deleted”).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Takubo with Sanchez’s system in achieving a communication system which can offer an optimum economical service with a small amount of storage capacity of a visitor location register (VLR) memory (see col. 2, lines 51-55; and col. 8, line 60- col. 8, line 2).

The combination of Sanchez and Aerrabotu fails to mention that the “network is a packet data network and the network is connected other network by the way of a “respective gateway”to each of respective network portion.

However, Aerrabotu teaches a mobile network including an Emergency Packet Data Network (E-PDN) coupled to gateways SGSN and GGSN (see Pars. [0011-12 and 0021-23]; whereby the E-PDN is being associated with the “packet data network” and the SGSN and GGSN are being associated with the “respective gateway”).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Aerrabotu with the teachings of Sanchez and Takubo in achieving a system that provides call connection as well as preventing authorized use of the system (see Aerrabotu; Par. 0011).

Regarding claims 2 and 14, Sanchez further discloses the apparatus of claims 1 and 15 wherein each mobile nodes (mobile terminals, see Par. [0017 and 0025]) has an identifier (subscriber's profile, see Pars. [0021 and 0043]) associated therewith and wherein said detector is further adapted to receive the identifier and for detecting values thereof (processor 4 continuous reads information exchange, see Par. [0025]).

Regarding claims 3 and 15, as recited in claims 2 and 14, Sanchez teaches mobile terminals, (see Par. [0017 and 0025]), but Sanchez and Takubo fail to teach that the radio communication system comprises a cellular radio communication system that provides for GPRS (General Packet Radio Service).

Aerrabotu teaches that the International Mobile Subscriber Identity (IMSI) is used as the mobile station identity in GPRS attach procedure when the mobile station does not have a SIM in a packet-switched data domain (see Pars. [0010] and [0014] respectively).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Aerrabotu with the teachings of Sanchez and Takubo in achieving a system that provides call connection as well as preventing authorized use of the system (see Aerrabotu; Par. 0011).

Regarding claims 4 and 16, as recited in claims 3 and 15, Sanchez further teaches the apparatus/method wherein at least the portion of the IMSI number (MSISDN which correspond to the mobile telephone number, see Par. [0043]) includes a Mobile Network Code (MNC) (the country code of the network in which it is located, see Par. [0043]), the Mobile Network Code identifying a home network portion

associated with each mobile (mobile terminals, see Par. [0017 and 0025]) node; the home network portion of the multiple network portions (consultation is made at the HLR and VLR when the subscriber enter into a new network, see Par. [0037]).

Regarding claims 5 and 17, as recited in claims 3 and 15 Sanchez further disclose apparatus/method wherein the IMSI number (MSISDN which correspond to the mobile telephone number, see Par. [0043]) includes a Mobile Country Code (MCC) and wherein the at least the portion of the IMSI number of which said detector detects the values comprises the Mobile Country Code; and at least the portion of the IMSI number comprises a mobile country code (the country code of the network in which it is located, see Par. [0043]).

Regarding claims 6 and 9, Sanchez further discloses an apparatus as recited in claims 1 and 15, wherein each node registers with a network portion of the multiple network portions (HLR, VLR and gateway 2) at selected times (location update every time mobile terminal changes location, see Page 2, line [0021]) and wherein the positional information detected by said detector is communicated by each mobile node (mobile terminals, see Par. [0017 and 0025]) pursuant to registration with the network part; the roaming network table further includes an indication of a time at which the values representative of the associations are stored at said storage element; and the roaming table further comprises identifying times at which values are entered thereat (table contains date of the last location update, see Pars. [0018, 0020-23, 0043-45 and 0049]).

Regarding claim 7, as recited in claim 1, Sanchez teaches mobile terminals (see Par. [0017 and 0025]), but Sanchez and Takubo fail to disclose that the communications of the mobile node are formatted into messages, the messages having header parts, and wherein the positional information detected by said detector is embodied in the header parts of the messages.

Aerrabotu teaches an incoming call IP address for device and the regulating packet flow which is use for Internet messaging subsystem (see Par. [0016])

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Aerrabotu with the teachings of Sanchez and Takubo in achieving a system that provides call connection as well as preventing authorized use of the system (see Aerrabotu; Par. 0011).

Regarding claim 10, as recited in claim 9, Sanchez further discloses that the apparatus further comprising a roaming table entry deleter coupled to said storage element said roaming table entry deleter selectably operable to delete selected values of the roaming entry table maintained at said storage element when aged beyond the selected age (subscriber's entry and exit information at the network are periodically eliminated/updated from the log table, see Par. [0055]).

Regarding claim 11, as recited in claim 10, Sanchez further discloses wherein said roaming entry deleter deletes values of the roaming network (foreign network) table stored thereat for longer than a selected time period, the selected time period identifying aging beyond the selected age (subscriber's entry and exit information at the network are periodically eliminated from the log table, see Pars. [0013 and 0055]).

Regarding claim 18, Sanchez further discloses an apparatus as recited in claims 1 and 15, wherein each node registers with a network portion of the multiple network portions (HLR, VLR and gateway 2) at selected times (location update every time mobile terminal changes location, see Page 2, line [0021]) and wherein the positional information detected by said detector is communicated by each mobile node (mobile terminals, see Par. [0017 and 0025]) pursuant to registration with the network part; the roaming network table further includes an indication of a time at which the values representative of the associations are stored at said storage element; and the roaming table further comprises identifying times at which values are entered thereat (table contains date of the last location update, see Pars. [0018, 0020-23, 0043-45 and 0049]).

Regarding claim 19, recited in claim 18, Sanchez further discloses the operations of accessing the roaming network table and determining the roaming relationships indicated therein (see Page 3, lines [0032-0036]).

Regarding claim 20, as recited in claim 13, Sanchez further discloses the operation of deleting entries out of the roaming network table once aged beyond the selected age (subscriber's entry and exit information at the network are periodically eliminated from the log table, see Pars. [0013 and 0055]).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

Art Unit: 2617

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwasi Karikari whose telephone number is

571-272-8566. The examiner can normally be reached on M-F (8 am - 4pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8566.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kwasi Karikari
Patent Examiner.
03/12/2008

/Charles N. Appiah/

Supervisory Patent Examiner, Art Unit 2617

